



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,162	12/01/2003	Aharon Shapira	25853	9375

7590 10/11/2007
Jon Eastman
625 N. Rexford Drive
Beverly Hills, CA 90210

EXAMINER

LEVITAN, DMITRY

ART UNIT	PAPER NUMBER
----------	--------------

2616

MAIL DATE	DELIVERY MODE
-----------	---------------

10/11/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

TH

Office Action Summary	Application No.	Applicant(s)	
	10/724,162	SHAPIRA, AHARON	
	Examiner	Art Unit	
	Dmitry Levitan	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 May 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____. | 6) <input type="checkbox"/> Other: _____. |

Drawings

1. The drawings are objected to, because Fig. 3 and 6 quality is not adequate to show power of each of subscribers A-E in the columns for time slots, as indicated by the corresponding legends on Fig. 3 and 6.
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: windows 44 and slots 44, described on page 13 are missing on Fig. 4.
3. Time relations between slots and windows, as shown on Fig. 4, directly contradict text on page 14. According the drawing, window 1 corresponds to slots 2, 3 and 4, but the disclosure portion on 14:13-16 states that window 1 corresponds to slots 1-3.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will

be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The disclosure is objected to because of the following informalities: use of Tables A and B in the disclosure is confusing, because it is not always clear if a Table A of the disclosure is directed to Fig. 2A or 5A. Examiner believes that replacing Table A (or B) with Table of Fig. 2A(B) or Table of Fig. 5A(B) will clarify this issue.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1-14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The specification does not provide sufficient details to enable a skilled in the art to make and use the invention because it does not adequately describe the following:

Regarding claims 1, 10 and 14, how to transmit specific power from BTS to each of the active subscribers. As CDMA system is known for transmitting one spread spectrum signal with

Art Unit: 2616

one value of power to all the subscribers. Power regulation of a forward channel in CDMA is known, but the regulations are directed to one power level at a time, which are common for all active subscribers. Claims 1, 10 and 14 limitations, directed to delivering "specific"/individual power levels to each of the active subscribers, are not supported by the disclosure as filed.

The specification does not provide enough details about the structure and operation of the elements associated with the above identified claimed features to enable one skilled in the art to make and use the invention without undue experimentation.

7. Claims 10-14 are rejected under 35 U.S.C. 112, first paragraph, as claims 10 and 14 are single means claims. See MPEP 2164.08(a).

A single means claim, i.e., where a means recitation does not appear in combination with another recited element of means, is subject to an undue breadth rejection under 35 U.S.C. 112, first paragraph. In re Hyatt, 708 F.2d 712, 714-715, 218 USPQ 195, 197 (Fed. Cir. 1983) (A single means claim which covered every conceivable means for achieving the stated purpose was held nonenabling for the scope of the claim because the specification disclosed at most only those means known to the inventor.). When claims depend on a recited property, a fact situation comparable to Hyatt is possible, where the claim covers every conceivable structure (means) for achieving the stated property (result) while the specification discloses at most only those known to the inventor.

8. Claims 2-9 and 11-13 are rejected as the claims depending on the rejected claims.

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 2616

10. Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the data transmission" in line 4. There is insufficient antecedent basis for this limitation in the claim. Claims 10 and 14 have the same problem in corresponding lines 5 and 6.

Claim 1 recites the limitation "the amount" in line 17. There is insufficient antecedent basis for this limitation in the claim. Claims 10 and 14 have the same problem in corresponding lines 17 and 18.

Claim 1, 10 and 14 limitations, directed to "the power level is associated with said transmission rate and is a product of a specific power and a multiplier, the specific power being the power level of transmission to the subscriber unit at a given fundamental data rate and said multiplier having a fixed direct relation to the associated transmission rate" are unclear as written.

11. Claims 2-9 and 11-13 are rejected as the claims depending on the rejected claims.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2616

13. Claims 1, 2, 8, 9 and 10-14 are rejected (as best understood) under 35 U.S.C. 103(a) as being unpatentable over Tiedemann (US 6,335,922) in view of Admitted Prior Art (Background of the invention, pages 1-4).

14. Regarding claims 1, 8, 9 and 10-14, Tiedemann substantially teaches the limitations of claims:

in a cellular radio system that transmits data through any Base Station Transceiver (BTS) to a plurality of active subscriber units, which are in radio communication with the BTS (CDMA system, as shown on Fig. 1 and 2 and disclosed on 6:1-8:10, comprising base station controller 10 on Fig. 2 and 6:22-32, wherein the system inherently comprises Base Station Transceivers, because they are essential for the system operation) and in a data connection state (sending data through data channels, as disclosed on 6:55-62), the data transmission from the BTS to any active subscriber unit at any time being at one of a plurality of given transmission rates and at a defined power level, relative to a maximum total power transmittable by the corresponding BTS (using available total power for data transmission in each cell, allocate the power resources to each user, as described on 5:27-37); the power level is associated with said transmission rate and is a product of a specific power and a multiplier, the specific power being the power level of transmission to the subscriber unit at a given fundamental data rate and said multiplier having a fixed direct relation to the associated transmission rate (second embodiment, which allocate transmit power to each user according to the transmission rate, 8:37-9:5, and as the CDMA system, inherently utilizing fundamental data rate)—

a method, a system and an apparatus for estimating the specific power of transmission from the BTS to each of the active subscriber units at any given time (allocation the forward link power to all scheduled users, as disclosed on 10:24-11:67), the method comprising:

(i) defining in time a succession of observation windows (defining a particular time period, equal to a number of frames, as disclosed on 11:34-37);

(ii) observing the data flowing into the BSC and addressed to each of the active subscribers and, for each subscriber, measuring the amount of such data flowing during each of a plurality of said observation windows, obtaining measured amounts (performing step 200 of Fig. 5 to measure the amount of data to be transmitted to each user 8:36-50); and

(iii) calculating from said measured amounts an estimated specific power for each of the subscribers (calculating allocated power resource for each of the subscribers, as disclosed on 9:4-6 and 11:34-54).

In addition, Tiedemann teaches a system with a packet network interface, as shown on Fig. 2 and 6:34-40.

Tiedemann does not teach transmitting data from IP-based network.

Admitted Prior Art teaches a typical system, as shown on Fig. 1, comprising external IP network 10, as disclosed on page 1.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add transmitting data from IP-based network of Admitted Prior Art to the system of Tiedemann to improve the system capabilities by providing the users with a connection to an IP network, particularly Internet.

In addition, regarding claims 11-14, Tiedemann teaches channel scheduler 12, as shown on Fig. 2 and 3, to perform the channel scheduling and control as described above.

15. Regarding claim 2, Tiedemann teaches each observation window as an integral amount of allocation time slots, 11:34-37.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Levitan whose telephone number is (571) 272-3093. The examiner can normally be reached on 8:30 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on (571) 272-2092. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Dmitry Levitan
Primary Examiner
Art Unit 2616

**DMITRY LEVITAN
PRIMARY EXAMINER**